20070 Sonetroit

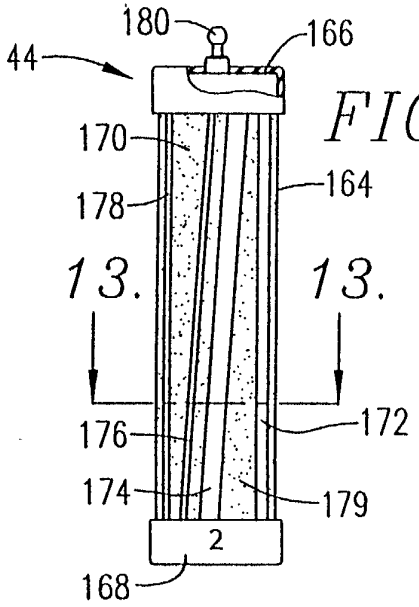


FIG. 11.

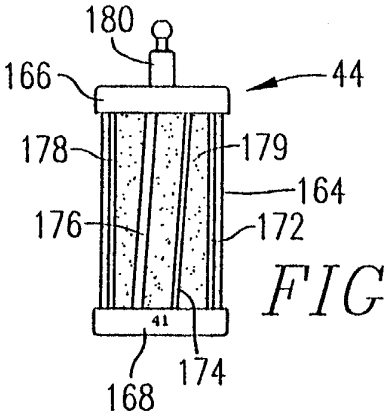


FIG. 12.

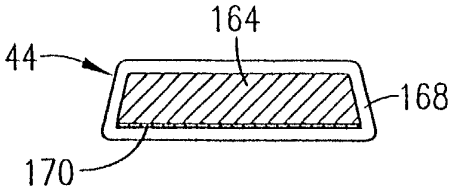


FIG. 13.

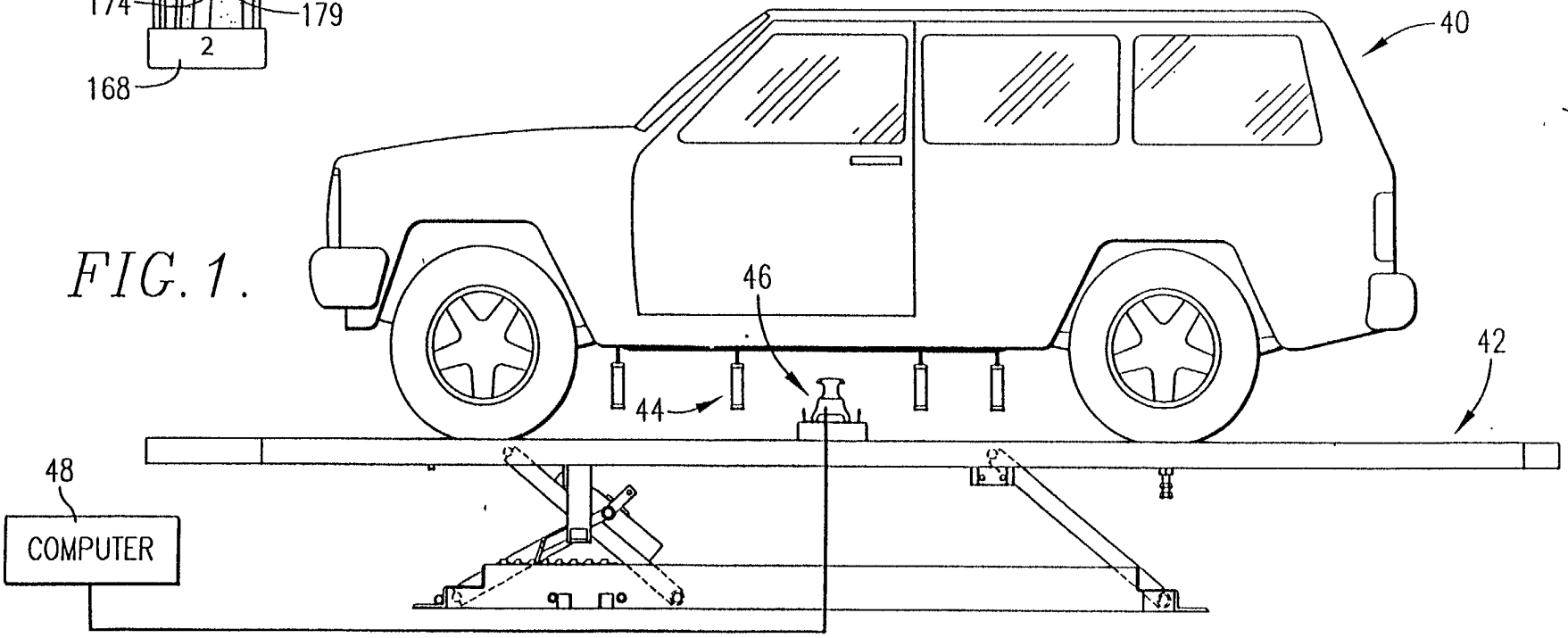


FIG. 1.

2007-0 Screenshot

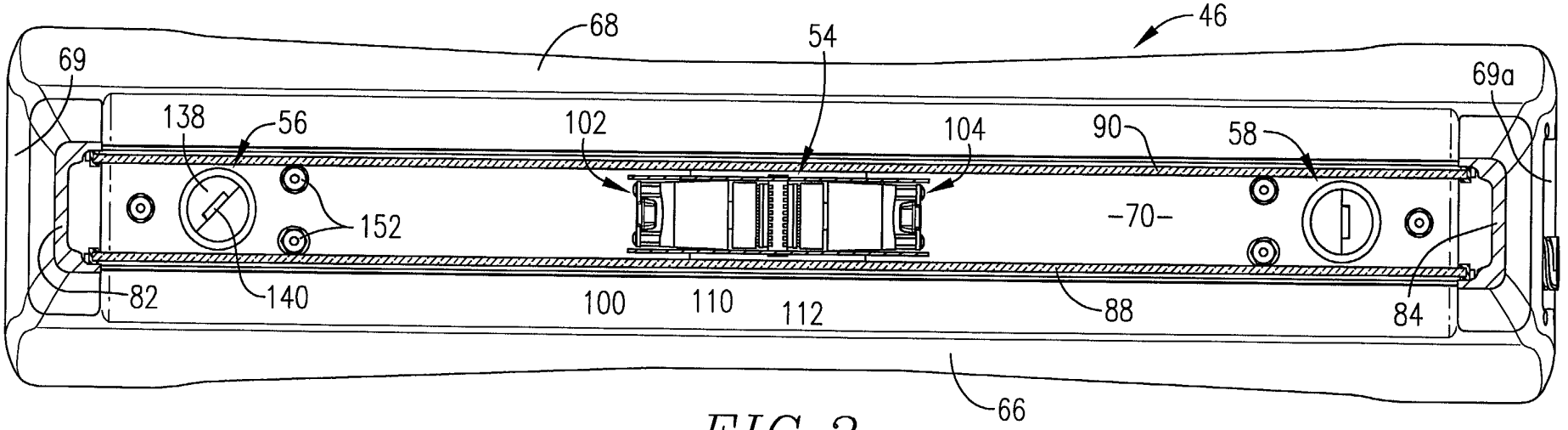


FIG. 3.

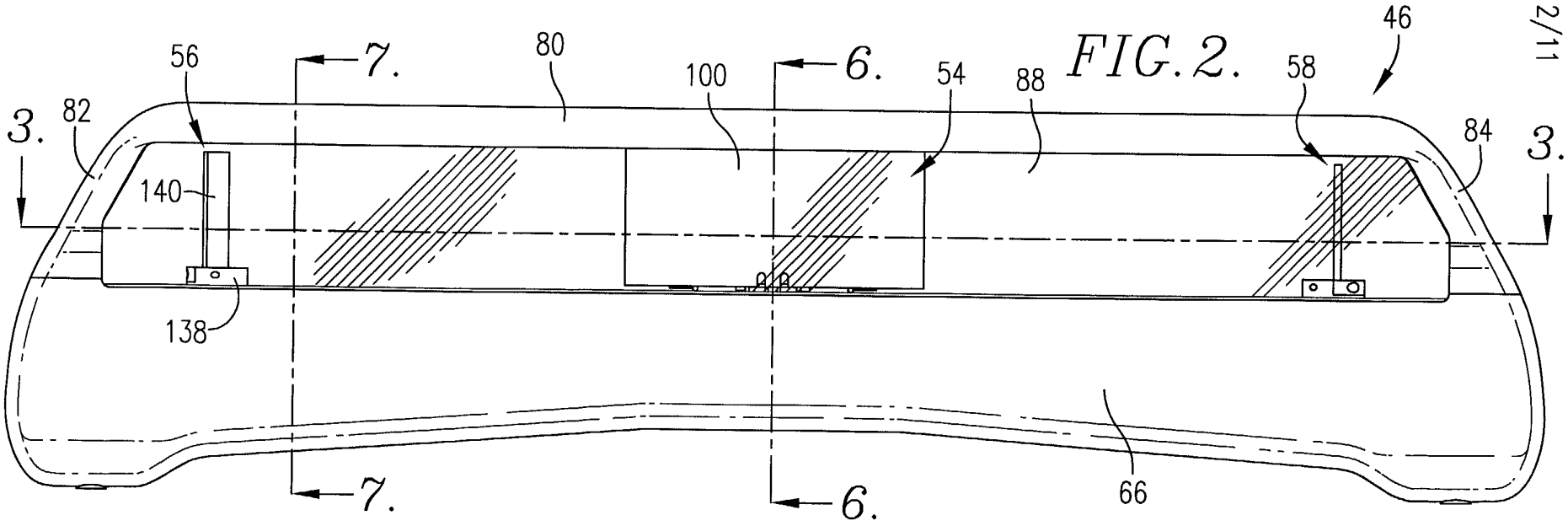


FIG. 2.

20070 Sonshot

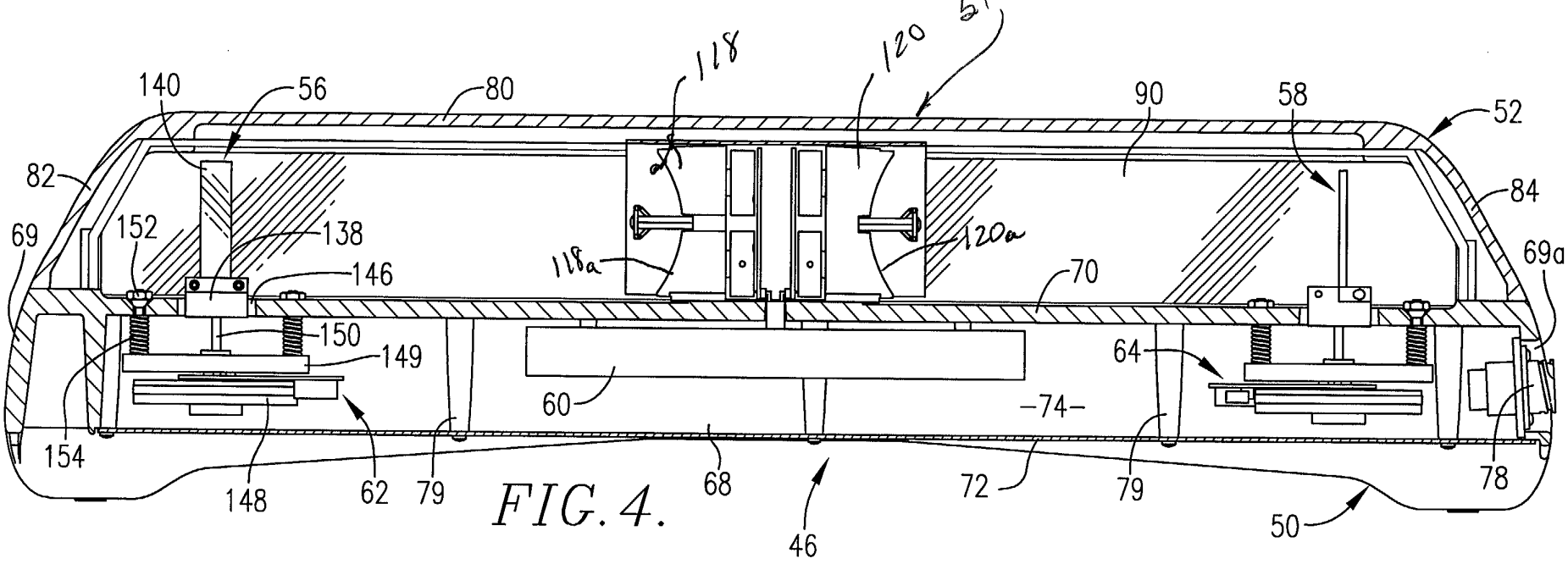


FIG. 4.

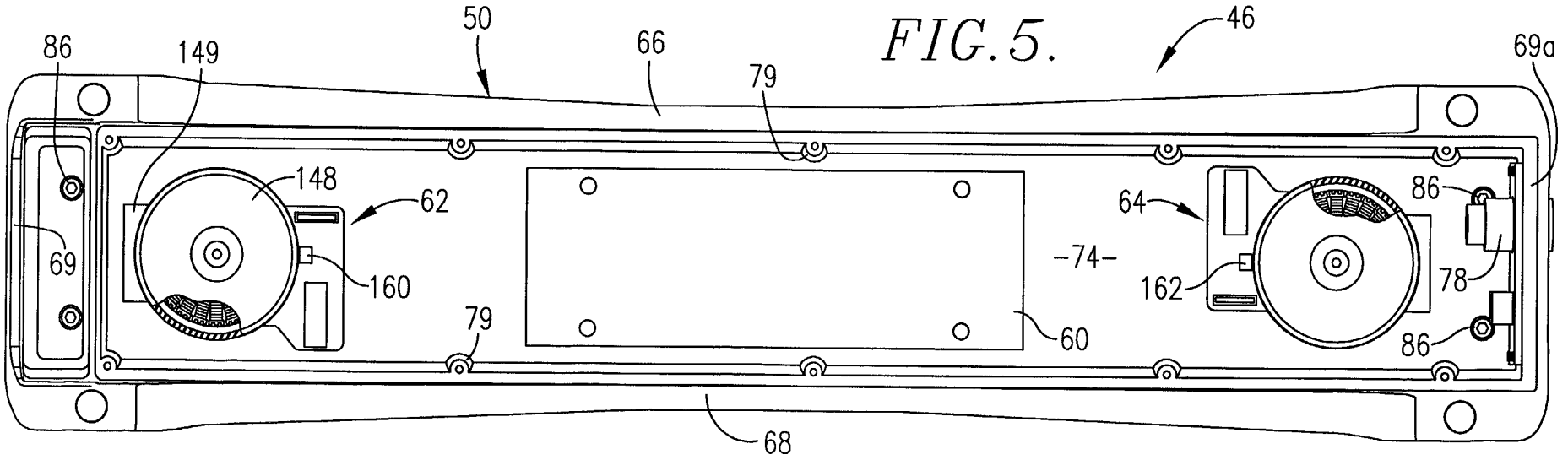
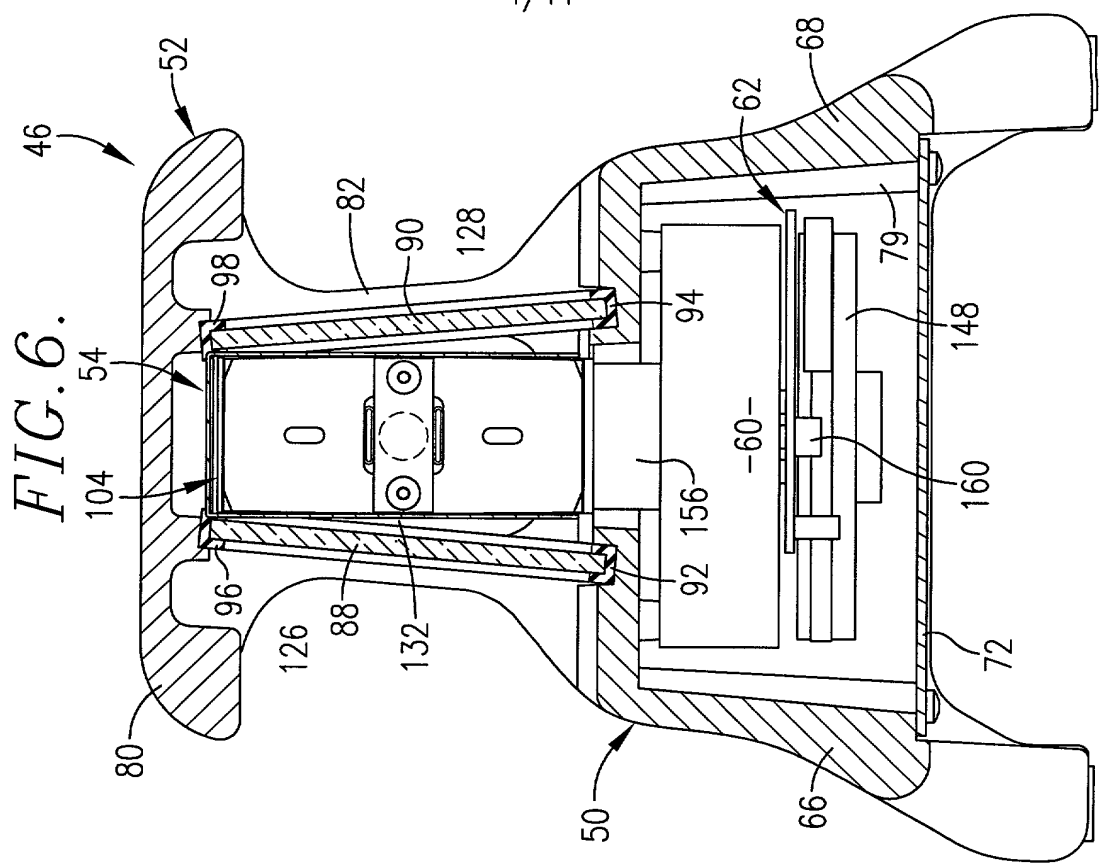


FIG. 5.

FIG. 6.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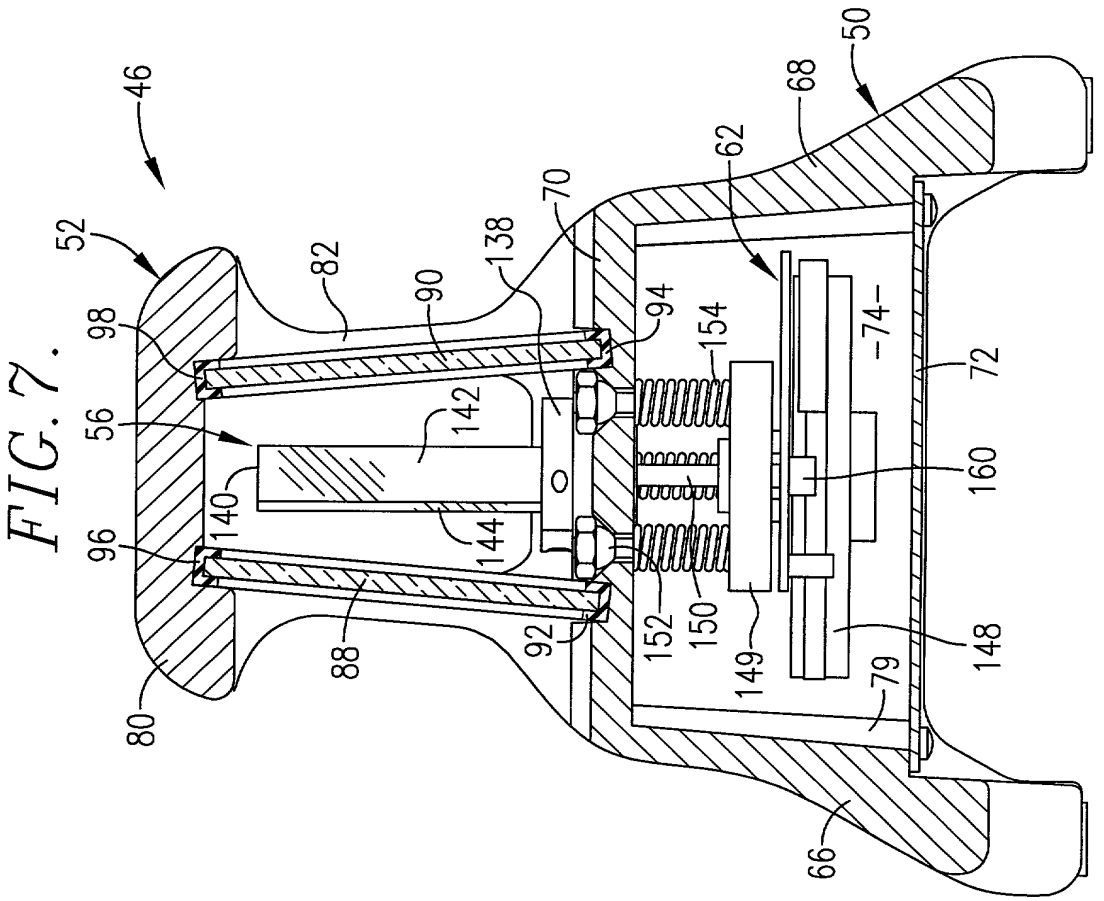
52
54
104
98
82
90
128
94
62
68
79
148
160
60
156
92
96
126
88
132
80
72
50
66

FIG. 7.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149
148
79
80
66

20070 Sonshot

FIG. 8.

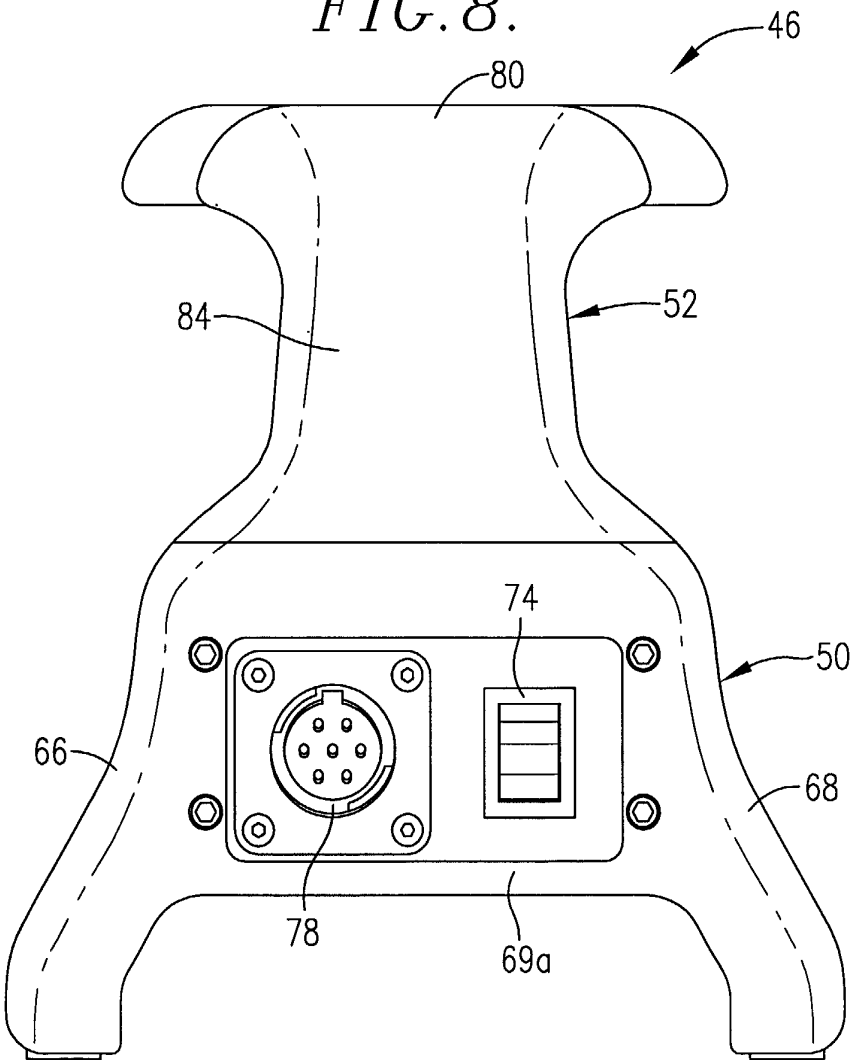


FIG. 9.

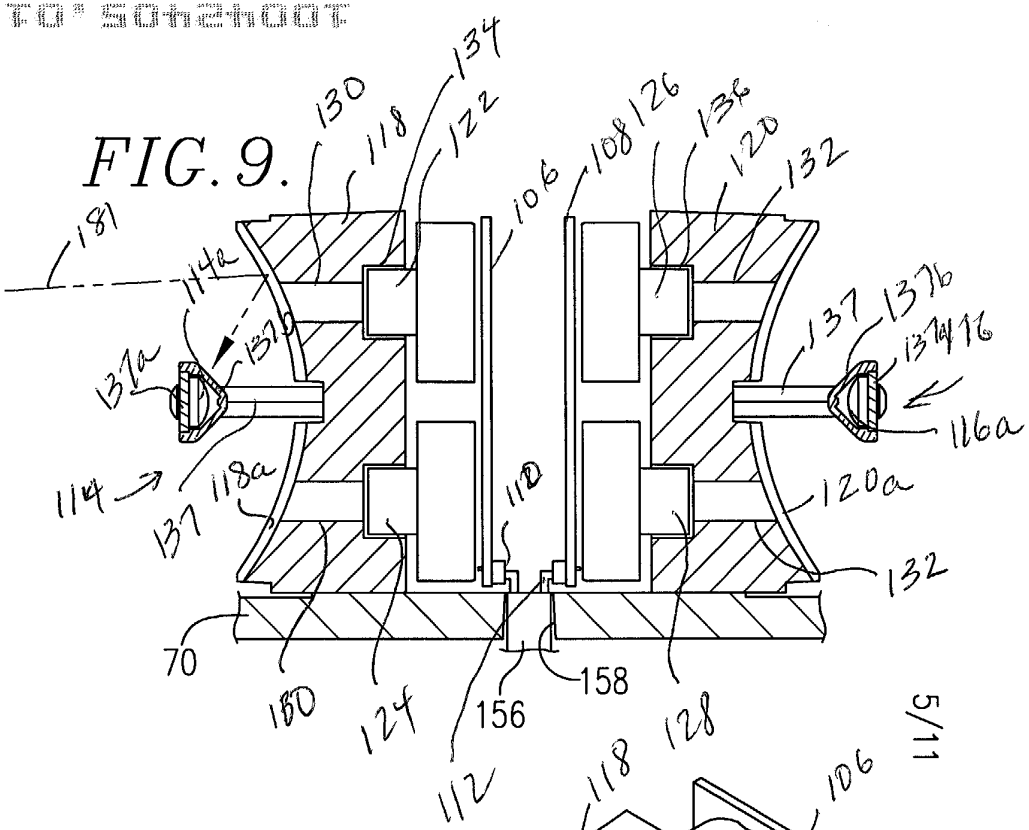


FIG. 10.

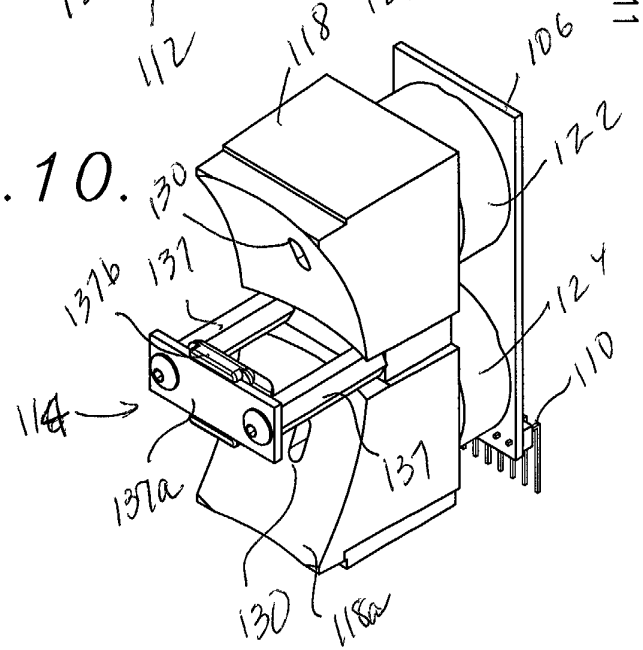


FIG. 14.

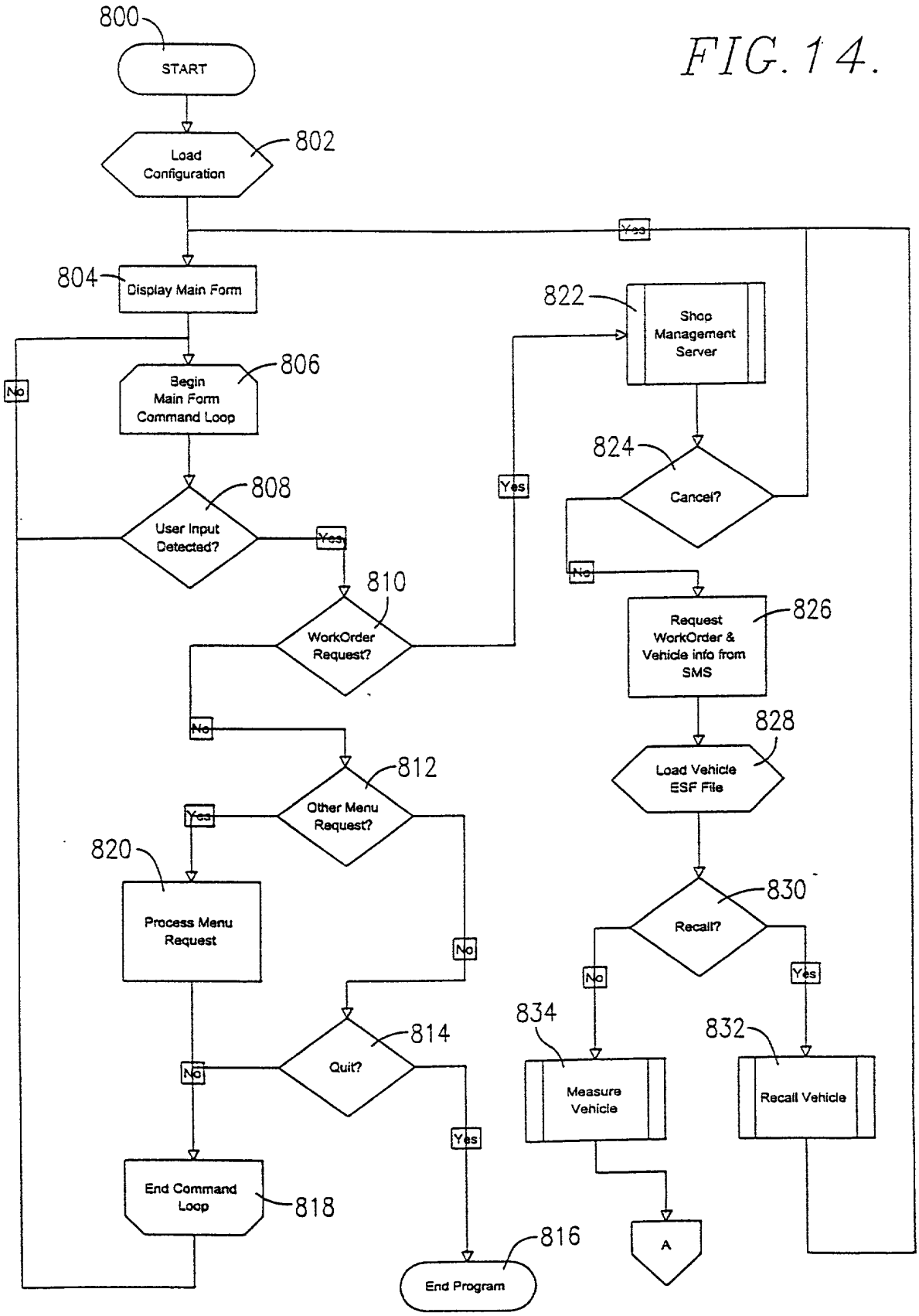
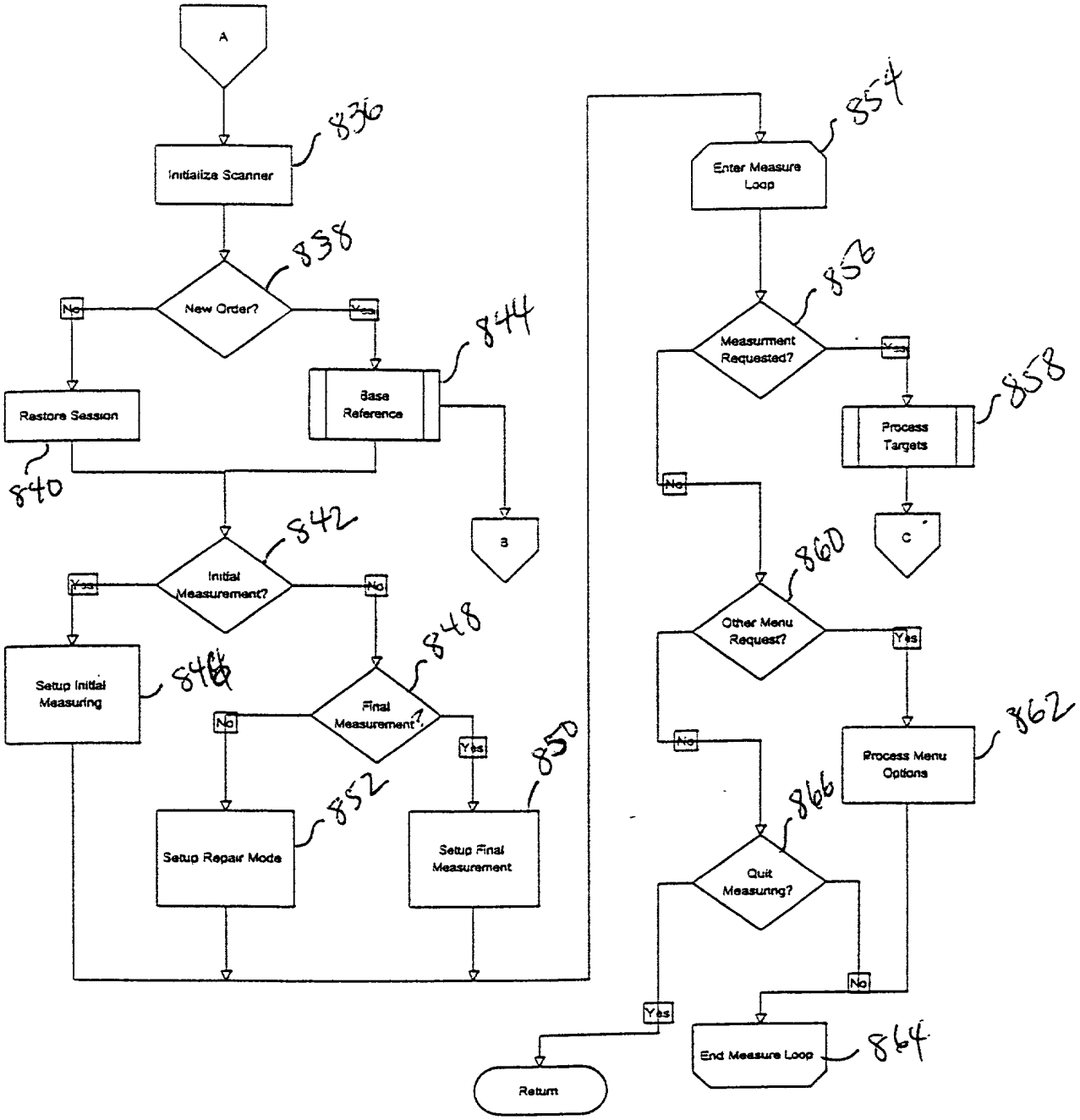

800
START
802
Load Configuration
804
Display Main Form
806
Begin Main Form Command Loop
808
User Input Detected?
Yes
No
810
WorkOrder Request?
Yes
No
812
Other Menu Request?
Yes
No
820
Process Menu Request
814
Quit?
No
Yes
818
End Command Loop
816
End Program
822
Shop Management Server
824
Cancel?
Yes
No
826
Request WorkOrder & Vehicle info from SMS
828
Load Vehicle ESF File
830
Recall?
No
Yes
834
Measure Vehicle
832
Recall Vehicle
A

FIG. 15.


A
Initialize Scanner
836
New Order?
838
No
Yes
Restore Session
840
Base Reference
844
B
Initial Measurement?
842
Yes
No
Setup Initial Measuring
846
Final Measurement?
848
No
Yes
Setup Repair Mode
852
Setup Final Measurement
850
Enter Measure Loop
854
Measurment Requested?
856
Yes
No
Process Targets
858
C
Other Menu Request?
860
Yes
No
Process Menu Options
862
Quit Measuring?
866
Yes
No
End Measure Loop
864
Return

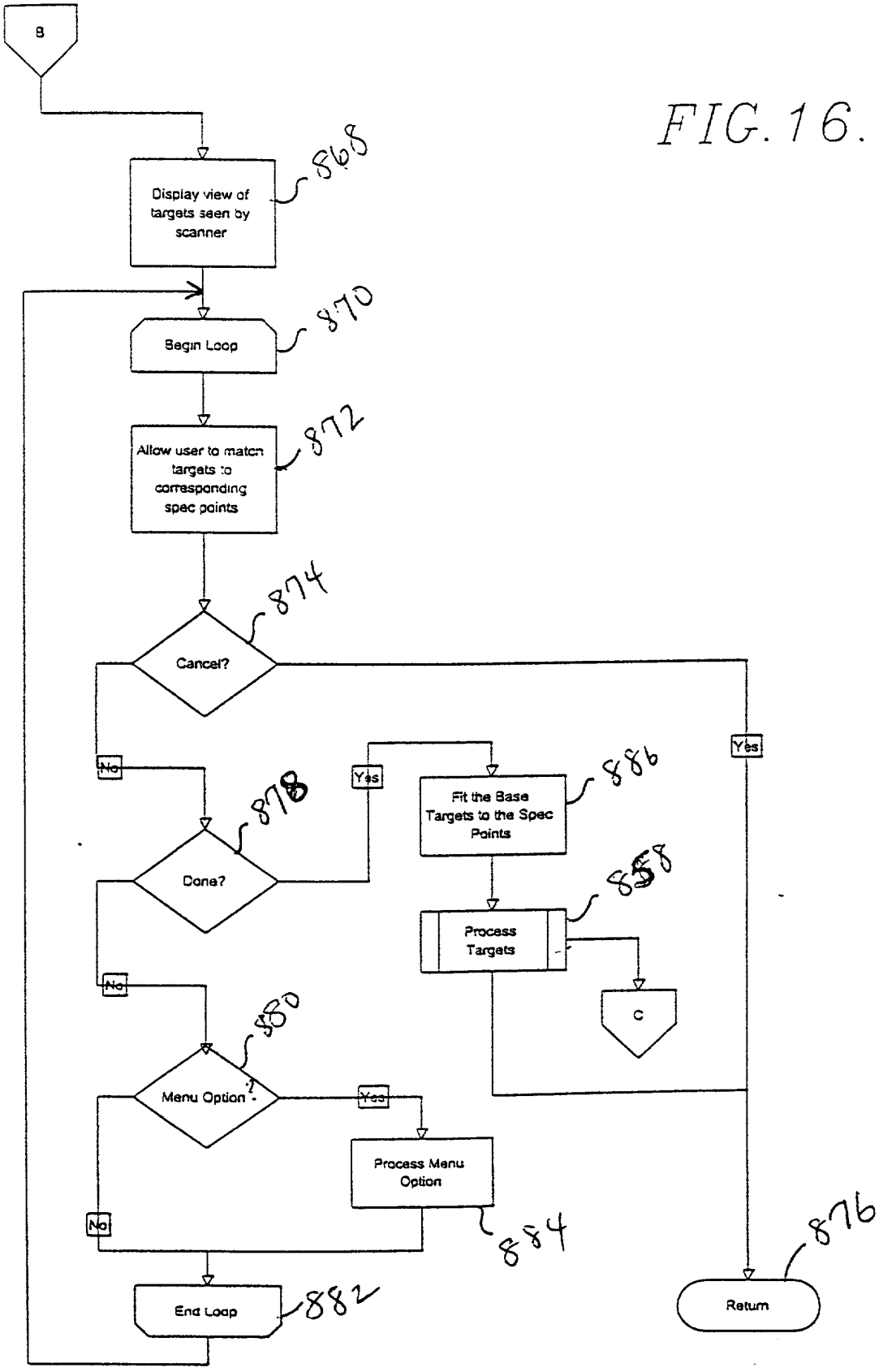

B
Display view of targets seen by scanner
868
Begin Loop
870
Allow user to match targets to corresponding spec points
872
Cancel?
874
No
Yes
Done?
878
Yes
Fit the Base Targets to the Spec Points
886
Process Targets
888
C
No
Menu Option ?
880
Yes
Process Menu Option
884
No
End Loop
882
Return
876

FIG. 16.

FIG. 17.

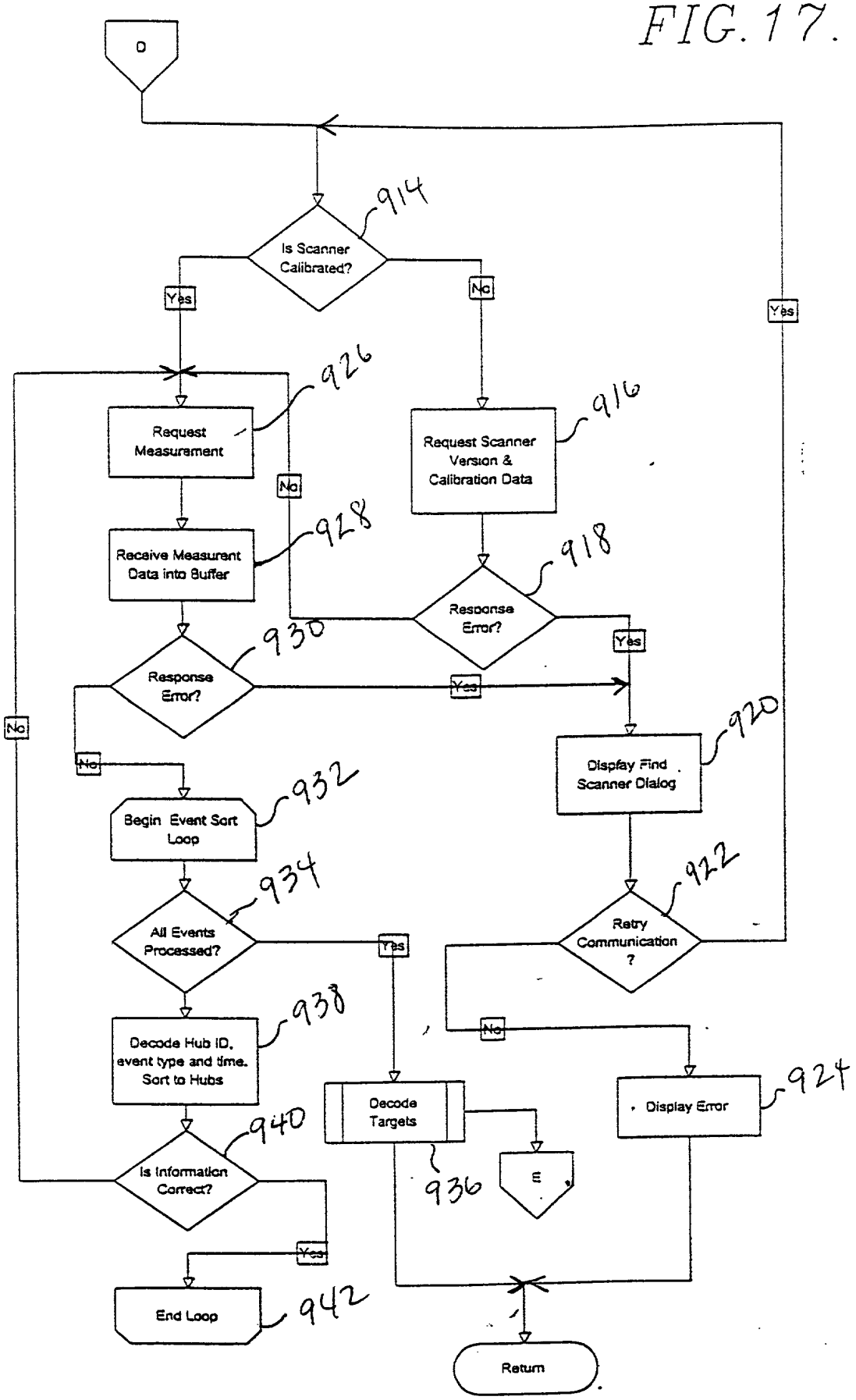

D
914
Is Scanner Calibrated?
Yes
No
926
Request Measurement
916
Request Scanner Version & Calibration Data
No
928
Receive Measurent Data into Buffer
918
Response Error?
930
Response Error?
Yes
Yes
No
No
920
Display Find Scanner Dialog
932
Begin Event Sort Loop
934
All Events Processed?
922
Retry Communication ?
Yes
938
Decode Hub ID, event type and time. Sort to Hubs
No
924
Display Error
Decode Targets
940
Is Information Correct?
936
E
Yes
942
End Loop
Return

FIG. 18.

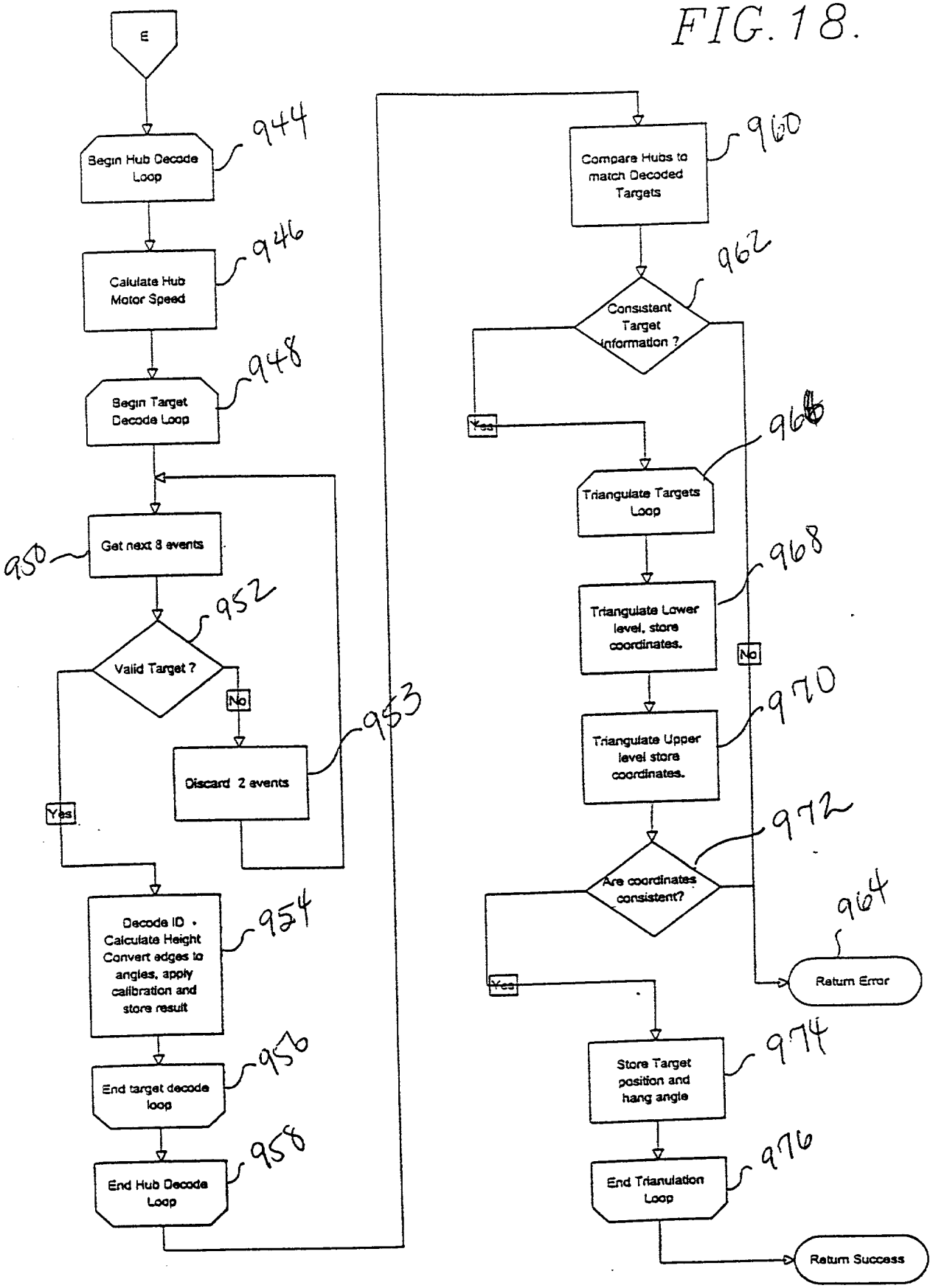
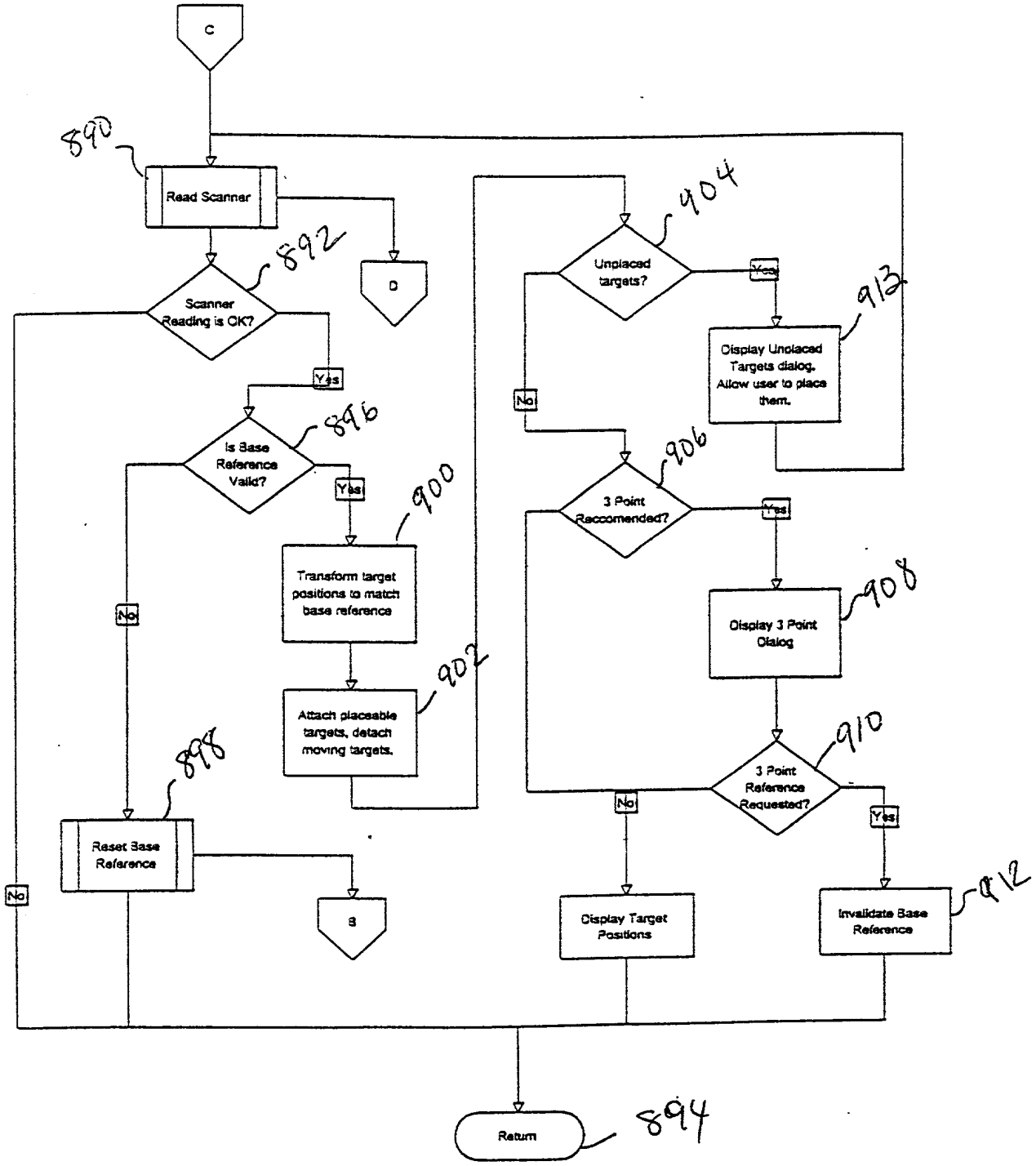

E
Begin Hub Decode Loop
944
Calulate Hub Motor Speed
946
Begin Target Decode Loop
948
Get next 8 events
950
Valid Target ?
952
No
Discard 2 events
953
Yes
Decode ID + Calculate Height Convert edges to angles, apply calibration and store result
954
End target decode loop
956
End Hub Decode Loop
958
Compare Hubs to match Decoded Targets
960
Consistent Target Information ?
962
Yes
Triangulate Targets Loop
966
Triangulate Lower level, store coordinates.
968
No
Triangulate Upper level store coordinates.
970
Are coordinates consistent?
972
Yes
Return Error
964
Store Target position and hang angle
974
End Trianulation Loop
976
Return Success

FIG. 19.


C
890
Read Scanner
892
Scanner Reading is OK?
D
No
Yes
896
Is Base Reference Valid?
No
Yes
900
Transform target positions to match base reference
902
Attach placeable targets, detach moving targets.
898
Reset Base Reference
No
B
904
Unplaced targets?
Yes
913
Display Unplaced Targets dialog. Allow user to place them.
No
906
3 Point Reccomended?
Yes
908
Display 3 Point Dialog
910
3 Point Reference Requested?
No
Yes
Display Target Positions
912
Invalidate Base Reference
Return
894